

E.R.C. Students n Navy Option Need Letters

**Enlistments Close
March 15, 1943 To
17 Year V-1 Men**

Men in the Army Enlisted Reserve Corps with a Navy commitment will be transferred to the Navy V-1 at the time the Enlisted Reserve is called to duty with the Army, it was announced yesterday through the Office of the Armed Forces Representative at the Institute. It is important that all men who come under this classification have all the necessary papers assembled by this time. Although the actual date has not as yet been announced, it will be necessary to have all credentials prepared to facilitate and expedite the enlistment of this large group of men.

Nine Forms Listed

Nine papers are needed for the transfer. Here at the Institute, the Advisory Office will obtain two of these for the men involved, so that arduous work is not imposed on certain offices. The first paper necessary is birth certificate, properly executed, with signature and seal of the Registrar of Vital Statistics or other proper custodian of the record.

If the birth of a candidate is not recorded, he must present acceptable evidence giving date of birth and names of parents. If he was not born in the United States, he must also present evidence of citizenship.

Three letters of recommendation from responsible citizens who are in a position to testify as to the applicant's character, etc., must also be prepared to be presented. These should be written on the business stationery of the person making the recommendation and should be addressed to The Director, Office of Naval Officer Procurement, 150 Causeway Street, Boston, Massachusetts. These letters should be obtained by the candidate rather than having the writer send them to the Navy.

One Letter from Dean

It is suggested by the Navy that one of these letters be obtained from a dean or other appropriate

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Oszy, Michaels Win Bridge Meet

The weekly practice bridge tournament, sponsored by the M.I.T. Bridge Club, was held last Saturday afternoon in Tyler Lounge. The winning team was composed of Alexander J. Osz, '43, and Alan S. Michaels, '44. Just behind these two, and in second place, were Robert M. Ilfeld, '45, and John R. Frye, '46.

These practice tournaments, Ilfeld said, are to determine which members of the club are good enough to participate in the intercollegiate tournaments, which have been planned to take place shortly. The practice contests also give beginners experience in tournament playing, so that they may improve their game enough to participate in the intercollegiate games.

While dates have not as yet been definitely set, matches between the M.I.T. Bridge Club, and groups from Emerson, Radcliffe, Wellesley, Harvard, Simmons, and Pine Manor have been planned. The announcement of exact dates when these intercollegiate matches are to be held is expected to come shortly, Ilfeld said.

Special students and workers in the various laboratories of the Institute are invited by the Bridge Club to participate in the practice tournaments. These contests are held at 1:45 P.M. every Saturday in the Tyler Lounge. A small entry fee is charged each person.

Technique On Sale In Bldg. 10 Since Friday: Copies Going Fast

"Those Techniques are going like hot cakes", said William B. Scott, '44, new General Manager of this year's issue. "Since they appeared on sale last week in the Lobby of Building 10, we on the staff haven't had a chance to take a second look at them."

"So far 700 books have come in and have been distributed or sold almost immediately. Yesterday's batch of 350 didn't even last out the afternoon." Although 1250 have been printed, the sale will continue until tomorrow afternoon, and after that all students with pledges may obtain their copy in the Technique office.

"Best Volume So Far"

"Personally", continued Scott, "I believe that this is the best volume so far. There has been a drastic change in the complete make-up which has made the edition into a modern book in step with the times. Technique, volume fifty-eight, has a very good chance of making the All-American in college year books. The last issue to make this classification was in 1939."

The book follows the theme of its cover "The Beaver at War" throughout its pages. The new feature of keeping school events in chronological order beginning with the bombing of Pearl Harbor and continuing through the entrance of the Class of 1946 to Field Day gives the impression of following a story of the school life here at Technology.

T.C.A. Cabinet Meeting Planned For 5:00 Today

The annual meeting of the T.C.A. Cabinet is to be held tomorrow, at 5:00 P.M. The meeting will be held in the T.C.A. office and is to be the last meeting of the year.

The annual written reports will be read by the division managers and the department directors. The freshman cabinet meeting will be held on Thursday, January 14.

The T.C.A. pledges made last Fall may be paid at the same time as the tuition, but this payment must be noted on the bill. It is particularly necessary for the Seniors to meet their pledges soon, as they will be leaving the Institute shortly.

A.I.Ch.E. To Hold Party At Steubens

**Members Of Faculty
Also To Be At Dinner**

The Technology chapter of the American Institute of Chemical Engineers is to hold a combined banquet and beer party beginning at 6:15 P.M. this Friday night in the Blue Room of Steuben's Ratskeller. Steuben's is on Boylston Street, off Tremont Street.

A number of faculty members are to be present at the affair, and an "enormous" contest among some of the professors has been planned, according to Robert P. Richmond, '43, president of the organization. Other informal entertainment has also been arranged for, Richmond stated. As yet the main speaker has not been announced.

After the dinner there is to be an important discussion of the society's proposed activities during the coming year. Tickets, selling for \$1.50, include the price of the dinner and two beers. These may be purchased from Robert P. Richmond, '43, Robert M. Isaacs, '44, Thomas F. Dolan, III, '44, or Andrew Stokes.

Effect of War on Technology's Life

Special features include the manner in which the Institute has been affected because of the war by the entrance of uniforms into Technology life; the classes held over the summer for the students in the new accelerated programs; the early graduation of the Class of 1942; Senior Weekend; and the entrance of the freshman class.

The regular features include fraternities, dormitory life, clubs, publications, socials, honorary societies, and forty-five pages of Senior graduates.

New Style of Make-Up

Contrary to previous volumes, this year's Technique includes many circular and angular cuts. All last year's pictures were the regular style, put in the book perpendicular to the bottom edge, but to offset the effect of an absolutely symmetrical page, this new make-up was decided upon. The cover has been padded which is an improvement over last year's hard cover.

The new Sophomore Board of the 1943 Technique will be announced shortly, stated Scott in the publication's office last night.

M.I.T. and Simmons To Hold Concert Jointly On Sat.

**Function To Be Last
Held In Morss Hall
For Duration Of War**

The annual Glee Club concert with Simmons will be held on Saturday, January 16 at 8:30 P.M. in Morss Hall of Walker Memorial.

After the concert there will be dancing to the music of records until midnight. There is no admission charge and everybody interested is welcome.

This is the last social function to be held in Morss Hall for the duration. The Walker Memorial Committee announced recently that because of additional difficulties that have presented themselves due to the present emergency no more social functions will be held in the hall. Any large dance given in Walker Memorial in the future will have to be held in the gym on the third floor.

Samuel G. Morrison, '44, Concert Manager of the Musical clubs, announced last night that there will be a joint rehearsal in the 5:15 Club room tomorrow afternoon at 5:00 P.M. and that he would like all participants in the concert Saturday night to be present.

Tech Radio Society To Meet Tonight

At its regular meeting to be held at 7:30 P.M. tonight in Room 10-275, the M.I.T. Radio Society will offer a demonstration of ultra-high frequency technique and apparatus.

Klystron oscillators, radiation and polarization effects, wave absorption, and allied phenomena exhibited by microwaves are to be discussed. All members of the society and those interested in becoming members are strongly urged to attend. Licensed amateurs from the Institute or the Radiation Laboratory are especially welcome.

The regular order of business will include the election of officers for the coming year, and final plans for the WERS net now being put into operation.

Official Notice

REGISTRATION

Registration material must be returned to Room 3-107 before 1 P.M., Friday, January 15, to avoid the fine of \$5.00. Deliver directly to Room 3-107.

METEOROLOGY

All E.R.C. students who have applied, or are applying for the Meteorology Program should report at the Advisory Office, Room 1-288, before Friday, January 15, 1943.

Completed applications for the Meteorology Program should now be left at the Advisory Office, Room 1-288, instead of mailing the application to Chicago.

J. D. Mitsch

Mackintosh, Root And Harjes Head Gridiron Society

**Gridiron Will Hold
Annual Banquet Tonight
At Hotel Vendome**

Arnold Mackintosh, Jr., '44, was elected president of Gridiron, honorary publications society at a meeting of the society held last Friday at 5:15 P.M. in Litchfield Lounge of Walker Memorial.

Mackintosh was last year's treasurer of The Tech. The new treasurer of Gridiron, Douglass E. Root, Jr., '44, is the present business manager of Voo-Doo, and Herman J. Harjes, '44, managing editor of Voo-Doo, was elected Secretary of the society.

The Gridiron will hold its annual banquet at 7:15 P.M. tonight in the Hotel Vendome. At this banquet, Mackintosh, Root, and Harjes will be presented with gold keys by Mr. James R. Killian, Executive Assistant to President Compton. Mr. Killian will also deliver a speech to the members and all invited guests.

Louis Lyons, Boston Globe editorial writer and Director of the Nieman Fellowships Program at Harvard, will speak to the members. Professor Frederick G. Fassett, Jr., Editor of the Technology Review will be the third guest speaker. Professor Fassett is to award the Gridiron prizes for articles and news stories that are deemed worthy.

Keeping in step with the request of the Institute Committee to make all affairs informal, the Gridiron banquet tonight will be informal for the first time in years.

Senior Dormitory To Give Banquet

The Senior House Committee has announced that a banquet is to be held beginning at 7:00 P.M. this Friday night at the Hotel Vendome. All persons who lived in the Senior House prior to its evacuation last Fall are invited to attend this affair. The charge per person is to be \$1.00, the difference between that and the cost being made up from the Senior House treasury.

After the dinner Professor Stephen G. Simpson, of the Department of Chemistry, will give a show illustrating the art of prestidigitation. During the remainder of the evening liquid refreshment, primarily of the malt variety, is to be served.

The committee in charge of the banquet consists of George C. Marakas, S. Richard Childerhose, James A. Malloch, Jr., Robert J. Schaeffer, William J. Cochran, Harry Ottinger, Jr., David Tilevitch, Kenneth L. Warden, Jr., Raymond A. Dunn, and William O. O'Neill, all of the Class of '43.

Senior Week Options Sale Ends Friday

**Tony Pastor Will Play
At Ball; A. Schaefer
To Speak At Banquet**

On February 1st the Hotel Statler Ball Room will be the scene of the Senior Ball. Tony Pastor, "the man who Pastorized swing," has been selected as maestro for the evening. His past performances include a six months' record breaking run at the Lincoln Hotel, New York City, three smashing weeks at the Paramount Theatre, New York City, and Victor Bluebird recordings of such favorites as "Let's Do It," "Paradiddle Joe," and "Pale Moon."

Redemption of options began yesterday and will continue through Friday. There will be men at the desk in the Main Lobby of Building 10 from 11:00 A.M. to 2:00 P.M. every day during this period. The price of the redemptions is \$9.50, but men who have not yet purchased options may still obtain tickets at \$14.50. The book of tickets includes tickets for the Class Banquet on January 28, an informal dance on Friday night, January 29, a tea dance on January 30, as well as the Senior Ball on Monday night, February 1.

**Professor Schaefer to Speak
at Banquet**

At the Stag Banquet to be held at the Hotel Vendome on Thursday night, January 28 Professor Albert A. Schaefer, of the Department of Business and Engineering Administration, will speak after dinner. Refreshments are to be served and will include an abundance of beer. Colonel Edward W. Putney was the

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Yale Prof To Talk About Normandie

**Bowling Will Precede
A.I.E.E. Talk Tonight**

The Boston section of the American Institute of Electrical Engineers, of which the Technology chapter is a member, is to hold a combined dinner, bowling party, and meeting beginning at 5:15 P.M. this afternoon. Special tables are to be available at Old France, 258 Huntington Avenue from 5:15 P.M. on, and bowling will continue at the alleys across from the restaurant, the Huntington Club Alleys, beginning at 6:00 P.M.

The meeting is to be held at 7:45 P.M. tonight in Room 200, Richards Hall, Northeastern University. Professor H. L. Seward (Commander DE-V (C) USNR), of Yale University will speak on "The Story of the Normandie."

Professor Seward was one of a committee of six experts appointed by the Secretary of the Navy to advise him regarding the disposition of the capsized Normandie. Professor Seward's talk will include the economics of superliners, the engineering history and features of the Normandie, and a description of the present salvage problem with the engineering aspects of its solution.

East And West Society To Discuss Religion Thurs.

The M.I.T. East and West Association is to hold a meeting at 7:45 P.M. Thursday evening January 14, in the Dutch Room of the Graduate House.

The topic to be discussed is "Religion in the World Today, and its Future". The discussion will be led by Professor Richard F. Koch of the Department of Modern Languages.

The Tech

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GASOLINE, DANCES, HITCHING

Gasoline rationing is a subject that has been bandied around from pillar to post by just about every able-bodied columnist and editorial writer in the country. The feeling must be that, unless you have made at least one bitter tirade against it or one righteous defense for it, you have not been affected by the war effort and are a no good complacent. We'll do neither.

Now that pleasure driving has been completely eliminated ("completely" is an unfortunate word here but is used in the same sense as one might say, "The black market is completely shut down"), the general effect is not one of violent opposition and challenge on this or that basis. Grumbling and fretting has nearly disappeared and people scarcely think twice about walking or taking the street car where once upon a time they would scarcely budge without the automobile.

Last weekend, the new regulation had its acid test and the Scabbard and Blade dancers came through with flying colors. Many Technology men and their dates rode to and from this formal dance on the streetcars. Once the novelty of the thing wore off, the travelers discovered that what the trolley lacks in romantic appeal it makes up for in its lazy, casual neighborliness, and no two trips are ever identical.

Students crossing the Harvard Bridge on these windy mornings have noted a marked decrease in the number of cars crossing the Basin but as well a more marked increase in the number of share-the-car drivers. The student who wants a ride and doesn't get it is very rare indeed, and for this reason we feel that, adage-wise, "One good deed deserves another." The reciprocal favors students can perform are all dictated by common courtesy and common sense.

1. Don't all crowd into the first car that stops even though this would mean that friends might become separated. Cars, springs, tires, wheels are all scarce and merit extra consideration, especially when they are not your own.

2. Don't start hitching directly beyond the intersection. This has the sole function of making "Bill," the policeman "nervous" and makes drivers "unhappy."

3. Don't impose.

And lastly, for good measure,

4. Don't blab.

Drivers tell us that they like to give Tech boys a lift. Let's keep the relations cordial.

TECHNIQUE MAKES A HIT

The 1943 Technique, nearly four months premature, makes a noteworthy contribution to the long list of Institute yearbooks, and stands as a remarkable tribute to the industry and application of its staff. It is our opinion that the '43 Technique has added extra inches to the footprints left by departed yearbookmen in hallowed Technology soil.

Handicapped as they were by the speed up system and by priorities, Technique's makers succeeded not only in producing but even in innovating. Glossy black printing over a dull black background is perhaps the most striking novelty. By popular request, the binding this year was made with padding and featured the "Bronze Rat," helmeted and converted to the all out effort.

Congratulations are most assuredly due to the boys who put out our yearbook, for the '43 Technique is a hit.

Are Our Plans Good For A European Reconstruction?

by Prof. George de Santillana

The following is the first of a projected series of provocative articles dealing with current events and with contemporary problems. It is the hope of the Editors that Prof. de Santillana's discussion will provide a partial stimulus for other faculty members and students to submit their points of view for consideration in this column.—Ed. Note.

Our recent operations in North Africa do not represent only a military success. They also stand for a beginning in the work of shaping the future world.

If it be true that engineers will have a great share and a great stake in the coming reconstruction, it behooves us to give our undivided attention to certain issues arising now from the local political confusion.

Let us admit that our intentions are honorable, and our tactical necessities compelling. The fact remains that Europeans have by now concluded that we intend to avail ourselves of the old ruling sets to assure law and order, and that continuity and stability count for us more than does simple justice.

The oppressed people's dream was that on the very day of our landing, the democrats would get out of jail and the fascists would have to pack their toothbrushes and go in. It now appears that where we land, our friends are kept in jail, and that the very same men who betrayed their country to the enemy are allowed once again to betray their former commitments.

Let us not wax indignant then, if we see the pro-democratic forces in Europe forsaking their hope in us and leaning toward Russia.

Ours Is the Mistake

The mistake does not lie with our political strategists; they are really acting now under the mandate of the nation, and the tragedy, if it comes, will have come from the familiar attitudes and misconceptions of all of us. It took us a long time to find out that words like gold, bonds, sound business, law-abidingness, fair play, and compromise, had no meaning any longer in the large part of the world; that our sound candid practical business leaders had been played for suckers by a colossal gangster combine, while our nation found itself cornered in the most desperate fight of its history.

With some simplicity, we then decided that we knew the people we could count on. The test was easy; they were supposed to believe in our system, share our certainties

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The Reader Speaks

Editor, The Tech,

Dear Sir,

The members of the Technique staff are to be highly congratulated on their recent issue of the yearbook. An excellent portrayal of the first year of war at the Institute is followed by well-chosen shots of informal undergraduate life. The witty captions add the spark of life to the new style appearing in this issue.

Under normal conditions of peace it is hard enough to publish a yearbook, but war troubles existing difficulties and adds new ones. For one thing the uncertainty of where one will be in six months could be very demoralizing to a long range publication such as Technique. Advertising during the war is scarce and all the publications have felt the pinch of financial curtailment. Probably the toughest problem arose when it was announced that the Class of '43 would graduate in February instead of in June. This shortened the working time of the staff by four months. The Technique staff however, stuck to its job, not only overcame all difficulties, but put out one of the best issues we've seen.

Yours truly,
 Gard Sloan, '44

Integration of M.I.T. Courses To Broaden Textile Industry

Few people have realized that the group of substances called textiles embraces more than the stuff one carries on his back, or makes up a bed with. They fail to realize that the term textiles constitutes any industrial material composed fundamentally of fibers... a concept which, freeing the imagination, encourages rampant ingenuity in creating building materials, for instance, for use in homes, industry, even in mechanical devices. Not able to see this significance, people wonder what the subject of textiles is doing at Technology, and whether it belongs there.

But it is an old story, going back as far as 1872 when Charles Kastner became interested in applying mechanical techniques to the improvement of the textile industry. New England was then the center; yet textile design, not original in this country in the first place, received little advance until an effort was made to get at the basis of the textile fiber and the mechanics of textile machinery. That is where Technology came in.

Textile Technology, supported by the Trustees of the Lowell Fund, has been under the auspices of the Massachusetts Institute of Design, later the Art Museum, but is now on its own feet as a branch of Mechanical Engineering. 1447 students have been trained since its founding; in one year, the course was represented by sixty-two students, and is now represented by twice as many graduate students as undergraduate. This is significant, since the graduate students from the Institute are finding a wide field in which to apply their essentially mechanical and scientific knowledge and techniques.

Back in 1883, the emphasis was placed by Professor Schwab on fundamentals in mechanism and mill engineering, but, as a result of the last World War, this emphasis was switched to research in and testing of materials. When, in 1916, the work moved into the present Institute building, Charles T. Main brought textile research—the scientific end of the business—into full bloom.

The Institute, at present, has the only other air-conditioned laboratory in the country. Temperature, perhaps, is the most important consideration in analysis of fibrous materials, since it effects all physical properties of fibers. This installation has allowed the Institute to make unprecedented advances in textile research. Textile Technology, moreover, must have and has the full support of all other departments, all the way from that of physics, through biology, to that of business. For the material textile itself involves in some way the knowledge and principles which are the basis of all the engineering and scientific courses.

Again, the Institute has now the only fully equipped laboratory operating in connection with any of the textile industries. Called a "three-ring circus" by Professor Edward R. Schwarz, now head of the Department, Textile Technology attempts (1) to educationally train students in textile technology, (2) develop new and improved methods of testing, and (3) anticipate needs by applying new developments and popularizing these developments. There is now only one course in mill engineering, where students are taught how mills are run, but the machinery aspect of the textile industry more aptly comes under Mechanical Engineering.

After all, what are textiles? Why do they have a use not exhibited generally by other materials? In the answer to these questions lies the fundamentals of the entire textile industry. For textiles constitute a material whose physical and chemical, whose mechanical properties are extremely significant, yet possessed by no other single material. Textiles combine strength with lightness and flexibility. They can be made of any material which can be formed into fibers. And the range of such materials varies all

the way from glass, plastic, synthetic, metallic, and such natural products as cellulose. All the physical properties, and the chemical properties, of these materials can be brought out in the form of textiles. Moreover, each kind of material mentioned has many variations, and many can be "custom built." The very nature of textiles allows them to be used feasibly in places where any material of similar properties cannot be applied. Sound proofing and insulation are only two of many examples.

In other words, a textile is simply a form of a material which adds to the original properties of the metal the physical properties of the textile. Hence an entire new range of materials can be built up. Cloth woven from glass fibers, for instance, combines the non-inflammable properties of glass with the lightness and flexibility and strength which can be achieved through weaving the glass fibers together. Moreover, it simplifies the use of materials of all kinds.

Thus Textile Technology becomes defined, and more especially so at the Institute, as the research end of the textile industry. The mechanical side is manifested in the design and improvement of testing machinery. Such machinery tests the properties of tensile strength, of brittleness, of extension and contraction, of flexibility. Further physical appliances tests for soundproofing, for the transmission of ultra-violet light, for insulation. There has been the development of time effects for high-speed testing. The importance of temperature is monumental. The conduction of sound, energy, gas, and the aspects of optics can all be brought in for the development of textiles.

Perhaps a better idea of the scope of the research, and, consequently, a better idea of the possibilities inherent in textiles, can be given by showing the interrelation of Textile Technology with the other courses at the Institute. Mechanical engineering has already been mentioned; it can be easily seen that new patterns of weaving together the fiber, itself a fundamental aspect, requires the designing of new machinery. The Department of Physics is relied upon for testing apparatus, especially for the specific physical properties of the materials employed, and, subsequently, the physical properties of the fabric itself, some of which have been mentioned. Microscopy is a very important example in this case. Even knowledge of electrons is essential in the makeup of fibers.

The scientific background in the field of chemistry applies not only generally to the chemical properties of the materials used themselves, but in such aspects as colloidal chemistry, fire-resistance, properties of coating, bleaching, etc. Organic chemistry applies a big part in the synthetic development of fibers, such as nylon, rayon, and the thousands of versatile products, made to order if necessary, from plastics. The use of natural fibers, such as those made of cellulose, hemp, jute, requires a biological background, to say nothing of the work of the bio-physicist on the molecular structure of fibers.

The tremendous mass of data piled up by textile research has prompted textile technologists to study statistical procedures, and the demand has resulted in new stimulus in the Department of Business. Since the laboratory is very closely integrated with the various industries throughout the country, even Professor Magoun has been called in for the field of industrial psychology.

The demands placed upon the textile technologist are great. The present military needs are tremendous, and have placed a great demand for textile materials engineered for specific uses. The war itself has required the creation of available substitutes and improved materials. The priorities on machinery production have likewise made it necessary for the creation

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Pucksters to Meet Northeastern Tonight on Boston Arena Ice

Frosh Face Browne and Nichols

Middlebury Loses To Beaver Squad By Count of 3-1

After a weekend in which they broke even in two games the Beaver puckmen are preparing for their contest tonight with the Northeastern Huskies in the Boston Arena. The team is out to avenge the defeat they received at the hands of Northeastern earlier in the season and in view of their recent performances the Beavers stand a good chance of taking the decision. The Tech-Northeastern game will be part of a doubleheader, the other half of which will feature Boston College and Dartmouth. The four teams will play in alternate periods starting at 7:30 P.M.

The lineup for Tech will probably be:

White	center	Noreen
Morrow	right wing	Willard
Bettes	left wing	Burdakin
Kaneb (Cap't)	rt defense	Verrochi
Seifert	left defense	Madden
Tashjian	Goalie	Mason

Alternates—Gillen and Russell.

On last Saturday afternoon the icemen notched their second victory over the Middlebury Panthers by a score of 3-1 having defeated that team at the Lake Placid Tournament in December by a count of 4-2. The game was scoreless until Dick Morrow slipped the priority pellet past the Middlebury netminder early in the second stanza assisted by Dick Bettes. In the third period Bud Willard scored assisted by Charlie Seifert and Johnny White made the lead three points when he tallied aided by Dick Morrow. Goalie Al Tashjian, who performed well throughout the contest, was within inches of a shut-out when Moore of the Panthers, assisted by Pepin, managed to slip one into the cage for the opponents lone tally.

At Northfield, Vermont on Friday the stickmen were less fortunate and dropped a contest to the Norwich Horsemen by a 7-3 score. Poor ice hampered the performance of both teams and necessitated that the teams play two fifteen and one ten minute periods. Bettes and Morrow teamed up to make two of the Tech scores while Morrow assisted Johnny White in the third tally. In both games the Beavers were minus the services of Seniors, Fred Kaneb (Capt.), Bill Verrochi, and Bob Mason. The lineups for the weekend games were as follows:

White	center	Noreen
Morrow	right wing	Willard
Bettes	left wing	Gillen
Burdakin	right defense	Russell
Seifert	left defense	Madden

Tashjian—Goalie.

According to Fran Carey, manager of the squad, a game is scheduled with the Ephmen from Williams College on Friday night in the Boston Arena. The Beavers hope to avenge a loss suffered at the hands of Williams in the Lake Placid tourney in December. The team will wind up its season with a game against the Dartmouth Indians at Hanover on January 19.

The frosh pucksters will be seeking their second win of the campaign tomorrow when they go out on the ice against the Browne and Nichols Preparatory School sextet on enemy ice in Cambridge. The first year men gained their first decision against Belmont Hill prep school in December by a count of 7-5. The Beaver yearlings will conclude their season on Saturday against a team from the Rivers Country Day School according to Kemp Reade, frosh manager. The lineup for the coming freshman games is as follows:

Center, Gale; left wing, Walker; right wing, Russell; left defense, Madden; right defense, Clifford; goalie, Cox; Alternates, Brayton, Gallagher, Starrett and White.

SPORTS CALENDAR

Tuesday, January 12
Swimming, varsity vs. Bowdoin, there, 4:00 P.M.

Hockey, varsity vs. Northeastern, Boston Arena, 8:30 P.M.

Wednesday, January 13
Swimming, freshman vs. Andover Academy, Alumni Pool, 4:30 P.M.
Basketball, varsity and freshman vs. Brown, Walker Gym, 7:00 P.M.
Hockey, freshman vs. Browne and Nichols Preparatory School, there.

Swimmers Drown Terrier Mermen In Alumni Pool

Findlay Lowers Mark In Backstroke Race Frosh Are Swamped

Notching their third victory of the season the Beaver mermen swamped the Boston University Terriers on Saturday night by a score of 53-22. Standout performance of the meet was turned in by Gordon Findlay of Tech who lowered the varsity backstroke record by more than three seconds when he copped that event in the time of 147.4 seconds. The former mark stood at 150.6 seconds. The Beaver natators fumbled a chance for an even higher score when they were disqualified in the medley relay.

Captain Bob Wheeler of the Terriers personally accounted for 10 of his team's points when he notched the 220 yard free style and the 220 yard breaststroke races. The individual results of the meet are as follows:

50-yard free style—Won by Leonard (T); second, Mara (B.U.); third, Cruckshank, (T); Time—26.1 secs.
Diving—Won by Hunn, (T); second, Greeley, (T); third, McKee, (B.U.); Points—79.2.

100-yard free style—Won by Lamadrid, (T); second, Ilfeld, (T); third, Mara, (B.U.); Time—60.4 secs.

150-yard backstroke—Won by Findlay, (T); second, Granlund, (T); third, McKee, (B.U.); Time—107.4 secs.

200-yard breast stroke — Won by Wheeler, (B.U.); second, Knodel, (T); third, Cochran, (T); Time—2 min., 46.5 secs.

440-yard free style—Won by Smith, (T); second, Bressler, (T); third, Hobbs, (B.U.); Time—5 min., 54.6 secs.

400-yard relay — Won by Tech (Lamadrid, Ilfeld, Cruckshank, Leonard.) Time—4 min., 16.1 secs.

300-yard medley relay — Won by B.U. (Sacks, McKee, Collard), Tech (disqualified), Time—4 min., 25 secs.

220-yard free style — Won by Wheeler, (B.U.); second, Bressler, (T); third, Smith, (T). Time—2 min., 36.3 secs.

The Beaver frosh did not fare as well in their encounter with the Terrier first year men, however, coming out on the short end of a 47-19 count.

Today the varsity mermen will journey to Brunswick, Maine to face

W.P.I. Defeated By Tech Skiers

Klein Takes Slalom Race Held On Sunday

Opening their season on the slopes of Mount Wachusett last weekend the Beaver ski team got off to a flying start when they overcame a formidable aggregation from Worcester Polytechnic Institute, by a score of 181-173. Led by Captain Jim Klein, the Tech skiers copped both ends of a dual meet which included cross-country and slalom competition.

The team left Boston at about noon on Saturday and arrived at Princeton, Mass., and Mount Wachusett, in time to run the cross-country event in which Tech triumphed 91-86.1. Saturday night the team stayed in a cabin on the mountain where they did their own cooking and waxed up for the next day's skiing. First place was clinched the next morning when the team sewed up the rather long slalom event by a count of 90-86.9. On Sunday evening they returned to Boston making plans for entering the coming Intercollegiates.

The hospitality of the W.P.I. boys couldn't be beaten according to thoughts expressed by some of the boys on the team. The W.P.I. outing club which has been defunct for several seasons has recently been revived and the first effort of their new lease on life was the very fine skiing team which the Beavers encountered.

On February 6 and 7, the Tech skiers are planning to send a team to the Intercollegiate Ski Union Championships of the Eastern Division. Captain Jim Klein will call a meeting of the team shortly to plot strategy for the approaching big event. Present plans call for a preparatory training trip during mid-term vacation.

The individual results and times of last weekend's meet are as follows:

- Cross Country**
1. Whitney (W), 23 min., 59.5 sec.
 2. Hegman (W), 24 min., 10.4 sec.
 3. Wilson (T), 24 min., 49.4 sec.
 4. Aschaffenburg (T), 25 min., 51.4 sec.
 5. Klein (T), 26 min., 2.0 sec.
 6. Mavor (T), 27 min., 41.4 sec.
 7. Shelby (T), 31 min., 40.0 sec.
 8. Sampson (W), 31 min., 46.5 sec.
 9. Brown (W), 36 min., 39.4 sec.
- Total: Tech, 91; W.P.I., 86.1.

- Slalom**
1. Klein (T), 54.2 sec.
 2. Aschaffenburg (T), 56.0 sec.
 3. Dinsmore (W), 58.3 sec.
 4. Whitney (W), 64.8 sec.
 5. Campbell (W), 64.9 sec.
 6. Wilson (T), 65.3 sec.
 7. Lewis (W), 72.9 sec.
 8. Hegman (W), 77.6 sec.
 9. Abreu (T), 77.7 sec.
 10. Mavor (T), 78.1 sec.
 11. Barritt (W), 87.7 sec.
 12. Shelby (T), 93.0 sec.
- Total: Tech, 90.0; W.P.I., 86.9.

the Bowdoin College Polar Bears in search of their fourth victory of the current campaign. On Wednesday the frosh swimmers will meet the Andover Academy team in a meet in the Alumni pool.

Crew House Reopened After Fuel Troubles

The recent temporary closing of the crew house has been explained as being caused by a lack of oil for heating purposes. That difficulty has been corrected, however, since an ample supply has been procured. The crew house is now open and all facilities are available to those who were making use of them before the Christmas recess, and any others interested. It has also been announced that organized freshman crew training will commence on the first day of the coming spring term.

Swordsmen Tied By Crimson Team Saturday, 13½-13½

Colsmann And Vicini Win Three Matches Each To Pace Team

After a hard struggle, which at one time found Tech ahead by seven points, the Beaver swordsmen were held to a tie by the Harvard fencing team, in a meet held last Saturday at Harvard. Although Tech won decisively in the foils and epee they were swamped in the sabre, thereby giving the teams an even split of the day's matches, 13½ apiece. Colsmann and Vicini, the Freshman star, were the outstanding fencers for the Beavers. The individual scores were as follows:

FOIL

For Tech: Colsmann defeated Rackwood (5-3), Du Bois (5-4), Coolidge (5-4); Ackerman defeated Du Bois (5-4), Thompson (5-1); Seaman defeated Rackwood (5-4).

For Harvard: Rackwood defeated Ackerman (5-3), Du Bois defeated Seaman (5-2); Thompson defeated Braendle (5-2). Final score: Tech 6, Harvard 3.

EPEE

For Tech: Kratz defeated Olmsted (3-0), Du Bois (3-0); Vicini defeated Olmsted (3-2), Mishana (3-1), Du Bois (3-2); Maconi defeated Johnson (3-0).

For Harvard: Olmsted defeated Maconi (3-2), Mishana defeated Kratz (3-0), Mishana and Maconi tied (3-3). Final score: Tech, 6½; Harvard, 2½.

SABRE

For Tech: Higgins defeated Kuhlman (5-1).

For Harvard: McNeal defeated Higgins (5-4), Schulman (5-3), and Maconi (5-3); Ward defeated Higgins (5-4), Schulman (5-2), and Maconi (5-4); Coolidge defeated Maconi (5-3), and Schulman (5-0). Final score: Tech, 1; Harvard, 8.

This weekend the team will make a trip to Hamilton College and Cornell U. for dual meets on Friday and Saturday, according to Larry Churchill, fencing manager. The following men are expected to make the trip: Ackerman, Colsmann, Seaman, Kratz, Maconi, Vicini, Higgins, Schulman, Braendle, and Horn.

Jumbos Topple Tech Hoopsters In Walker Gym

Jumblets Edge Frosh In Preliminary Fray, Madden Paces Attack

Unable to rally after an exceedingly slow start, the Beaver cagers succumbed to an onslaught of shooting dished out by a powerful Tufts College quintet last Friday in Walker Memorial Gym to the tune of 74-31. Paced by a trio of frosh who amassed 42 points among them, the Jumbos were unbeatable as they administered the worst defeat the Beavers have received so far this season. The losing cause was led by Cal Taft who garnered a total of 7 points. Spud Shapiro got 20 markers for the victors and was followed by Rock Antonelli with 15 tallies.

Able to cut the cords but once in the opening few moments the Tech cagers found themselves on the short end of a 24-2 count at the end of ten minutes of play. By the half the Beavers had scored but 8 points against the opponents 37. Making full use of all free throws, in which they got 14 out of 19, the Jumbos ran the count up to 57-21 at the end of the third stanza.

The frosh were edged out in a late rally staged by the Tufts first year quintet and met defeat by the count of 41-37. Madden garnered 10 points for the losers while Brown followed closely with 8 markers.

This Friday the Brown University Bruins will invade Walker Gym and the Beavers will attempt to turn the tide of defeat which of late has been their lot. The freshman preliminary with the cubs will get under way at 7:00 P.M.

Cindermen To Pick New Captain, Sat.

Frosh Trophy To Be Awarded At Meeting

"The track team will have a meeting this Friday afternoon at 5:00 P.M. in the Barber Field House, for the purpose of electing a new captain for the coming year and deciding the varsity-frosh question," stated Oscar Hedlund, coach of the teams.

"The election of captain for the coming year has come up so early," said Oscar, "because of the early senior graduation and the loss of our present captain through graduation." The new captain will hold that position until January 1944.

"In regards to the freshman status," he continued, "the freshman schedule for the winter and spring meets will continue as usual. If some of the freshmen want to run in varsity competition, and we think it is advisable, we will let them run on the varsity team."

The L. S. Thorsen trophy will also be presented at this meeting. This

(Continued on Page 4)

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The Tech

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Tuesday, January 12, 1943

No. 3

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GASOLINE, DANCES, HITCHING

Gasoline rationing is a subject that has been bandied around from pillar to post by just about every able-bodied columnist and editorial writer in the country. The feeling must be that, unless you have made at least one bitter tirade against it or one righteous defense for it, you have not been affected by the war effort and are a no good complacent. We'll do neither.

Now that pleasure driving has been completely eliminated ("completely" is an unfortunate word here but is used in the same sense as one might say, "The black market is completely shut down"), the general effect is not one of violent opposition and challenge on this or that basis. Grumbling and fretting has nearly disappeared and people scarcely think twice about walking or taking the street car where once upon a time they would scarcely budge without the automobile.

Last weekend, the new regulation had its acid test and the Scabbard and Blade dancers came through with flying colors. Many Technology men and their dates rode to and from this formal dance on the streetcars. Once the novelty of the thing wore off, the travelers discovered that what the trolley lacks in romantic appeal it makes up for in its lazy, casual neighborliness, and no two trips are ever identical.

Students crossing the Harvard Bridge on these windy mornings have noted a marked decrease in the number of cars crossing the Basin but as well a more marked increase in the number of share-the-car drivers. The student who wants a ride and doesn't get it is very rare indeed, and for this reason we feel that, adage-wise, "One good deed deserves another." The reciprocal favors students can perform are all dictated by common courtesy and common sense.

1. Don't all crowd into the first car that stops even though this would mean that friends might become separated. Cars, springs, tires, wheels are all scarce and merit extra consideration, especially when they are not your own.

2. Don't start hitching directly beyond the intersection. This has the sole function of making "Bill," the policeman "nervous" and makes drivers "unhappy."

3. Don't impose.

And lastly, for good measure,

4. Don't blab.

Drivers tell us that they like to give Tech boys a lift. Let's keep the relations cordial.

TECHNIQUE MAKES A HIT

The 1943 Technique, nearly four months premature, makes a noteworthy contribution to the long list of Institute yearbooks, and stands as a remarkable tribute to the industry and application of its staff. It is our opinion that the '43 Technique has added extra inches to the footprints left by departed yearbookmen in hallowed Technology soil.

Handicapped as they were by the speed up system and by priorities, Technique's makers succeeded not only in producing but even in innovating. Glossy black printing over a dull black background is perhaps the most striking novelty. By popular request, the binding this year was made with padding and featured the "Bronze Rat," helmeted and converted to the all out effort.

Congratulations are most assuredly due to the boys who put out our yearbook, for the '43 Technique is a hit.

Are Our Plans Good For A European Reconstruction?

by Prof. George de Santillana

The following is the first of a projected series of provocative articles dealing with current events and with contemporary problems. It is the hope of the Editors that Prof. de Santillana's discussion will provide a partial stimulus for other faculty members and students to submit their points of view for consideration in this column.—Ed. Note.

Our recent operations in North Africa do not represent only a military success. They also stand for a beginning in the work of shaping the future world.

If it be true that engineers will have a great share and a great stake in the coming reconstruction, it behooves us to give our undivided attention to certain issues arising now from the local political confusion.

Let us admit that our intentions are honorable, and our tactical necessities compelling. The fact remains that Europeans have by now concluded that we intend to avail ourselves of the old ruling sets to assure law and order, and that continuity and stability count for us more than does simple justice.

The oppressed people's dream was that on the very day of our landing, the democrats would get out of jail and the fascists would have to pack their toothbrushes and go in. It now appears that where we land, our friends are kept in jail, and that the very same men who betrayed their country to the enemy are allowed once again to betray their former commitments.

Let us not wax indignant then, if we see the pro-democratic forces in Europe forsaking their hope in us and leaning toward Russia.

Ours Is the Mistake

The mistake does not lie with our political strategists; they are really acting now under the mandate of the nation, and the tragedy, if it comes, will have come from the familiar attitudes and misconceptions of all of us. It took us a long time to find out that words like gold, bonds, sound business, law-abidingness, fair play, and compromise, had no meaning any longer in the large part of the world; that our sound candid practical business leaders had been played for suckers by a colossal gangster combine, while our nation found itself cornered in the most desperate fight of its history.

With some simplicity, we then decided that we knew the people we could count on. The test was easy; they were supposed to believe in our system, share our certainties

(Continued on Page 4)

The Reader Speaks

Editor, The Tech,

Dear Sir,

The members of the Technique staff are to be highly congratulated on their recent issue of the yearbook. An excellent portrayal of the first year of war at the Institute is followed by well-chosen shots of informal undergraduate life. The witty captions add the spark of life to the new style appearing in this issue.

Under normal conditions of peace it is hard enough to publish a yearbook, but war trebles existing difficulties and adds new ones. For one thing the uncertainty of where one will be in six months could be very demoralizing to a long range publication such as Technique. Advertising during the war is scarce and all the publications have felt the pinch of financial curtailment. Probably the toughest problem arose when it was announced that the Class of '43 would graduate in February instead of in June. This shortened the working time of the staff by four months. The Technique staff however, stuck to its job, not only overcame all difficulties, but put out one of the best issues we've seen.

Yours truly,
Gard Sloan, '44

Integration of M.I.T. Courses To Broaden Textile Industry

Few people have realized that the group of substances called textiles embraces more than the stuff one carries on his back, or makes up a bed with. They fail to realize that the term textiles constitutes any industrial material composed fundamentally of fibers . . . a concept which, freeing the imagination, encourages rampant ingenuity in creating building materials, for instance, for use in homes, industry, even in mechanical devices. Not able to see this significance, people wonder what the subject of textiles is doing at Technology, and whether it belongs there.

But it is an old story, going back as far as 1872 when Charles Kastner became interested in applying mechanical techniques to the improvement of the textile industry. New England was then the center; yet textile design, not original in this country in the first place, received little advance until an effort was made to get at the basis of the textile fiber and the mechanics of textile machinery. That is where Technology came in.

Textile Technology, supported by the Trustees of the Lowell Fund, has been under the auspices of the Massachusetts Institute of Design, later the Art Museum, but is now on its own feet as a branch of Mechanical Engineering. 1447 students have been trained since its founding; in one year, the course was represented by sixty-two students, and is now represented by twice as many graduate students as undergraduate. This is significant, since the graduate students from the Institute are finding a wide field in which to apply their essentially mechanical and scientific knowledge and techniques.

Back in 1883, the emphasis was placed by Professor Schwamb on fundamentals in mechanism and mill engineering, but, as a result of the last World War, this emphasis was switched to research in and testing of materials. When, in 1916, the work moved into the present Institute building, Charles T. Main brought textile research—the scientific end of the business—into full bloom.

The Institute, at present, has the only other air-conditioned laboratory in the country. Temperature, perhaps, is the most important consideration in analysis of fibrous materials, since it affects all physical properties of fibers. This installation has allowed the Institute to make unprecedented advances in textile research. Textile Technology, moreover, must have and has the full support of all other departments, all the way from that of physics, through biology, to that of business. For the material textile itself involves in some way the knowledge and principles which are the basis of all the engineering and scientific courses.

Again, the Institute has now the only fully equipped laboratory operating in connection with any of the textile industries. Called a "three-ring circus" by Professor Edward R. Schwarz, now head of the Department, Textile Technology attempts (1) to educationally train students in textile technology, (2) develop new and improved methods of testing, and (3) anticipate needs by applying new developments and popularizing these developments. There is now only one course in mill engineering, where students are taught how mills are run, but the machinery aspect of the textile industry more aptly comes under Mechanical Engineering.

After all, what are textiles? Why do they have a use not exhibited generally by other materials? In the answer to these questions lies the fundamentals of the entire textile industry. For textiles constitute a material whose physical and chemical, whose mechanical properties are extremely significant, yet possessed by no other single material. Textiles combine strength with lightness and flexibility. They can be made of any material which can be formed into fibers. And the range of such materials varies all

the way from glass, plastic, synthetic, metallic, and such natural products as cellulose. All the physical properties, and the chemical properties, of these materials can be brought out in the form of textiles. Moreover, each kind of material mentioned has many variations, and many can be "custom built." The very nature of textiles allows them to be used feasibly in places where any material of similar properties cannot be applied. Sound proofing and insulation are only two of many examples.

In other words, a textile is simply a form of a material which adds to the original properties of the metal the physical properties of the textile. Hence an entire new range of materials can be built up. Cloth woven from glass fibers, for instance, combines the non-inflammable properties of glass with the lightness and flexibility and strength which can be achieved through weaving the glass fibers together. Moreover, it simplifies the use of materials of all kinds.

Thus Textile Technology becomes defined, and more especially so at the Institute, as the research end of the textile industry. The mechanical side is manifested in the design and improvement of testing machinery. Such machinery tests the properties of tensile strength, of brittleness, of extension and contraction, of flexibility. Further physical appliances tests for sound-proofing, for the transmission of ultra-violet light, for insulation. There has been the development of time effects for high-speed testing. The importance of temperature is monumental. The conduction of sound, energy, gas, and the aspects of optics can all be brought in for the development of textiles.

Perhaps a better idea of the scope of the research, and, consequently, a better idea of the possibilities inherent in textiles, can be given by showing the interrelation of Textile Technology with the other courses at the Institute. Mechanical engineering has already been mentioned; it can be easily seen that new patterns of weaving together the fiber, itself a fundamental aspect, requires the designing of new machinery. The Department of Physics is relied upon for testing apparatus, especially for the specific physical properties of the materials employed, and, subsequently, the physical properties of the fabric itself, some of which have been mentioned. Microscopy is a very important example in this case. Even knowledge of electrons is essential in the makeup of fibers.

The scientific background in the field of chemistry applies not only generally to the chemical properties of the materials used themselves, but in such aspects as colloidal chemistry, fire-resistance, properties of coating, bleaching, etc. Organic chemistry applies a big part in the synthetic development of fibers, such as nylon, rayon, and the thousands of versatile products, made to order if necessary, from plastics. The use of natural fibers, such as those made of cellulose, hemp, jute, requires a biological background, to say nothing of the work of the bio-physicist on the molecular structure of fibers.

The tremendous mass of data piled up by textile research has prompted textile technologists to study statistical procedures, and the demand has resulted in new stimulus in the Department of Business. Since the laboratory is very closely integrated with the various industries throughout the country, even Professor Magoun has been called in for the field of industrial psychology.

The demands placed upon the textile technologist are great. The present military needs are tremendous, and have placed a great demand for textile materials engineered for specific uses. The war itself has required the creation of available substitutes and improved materials. The priorities on machinery production have likewise made it necessary for the creation

(Continued on Page 4)

Pucksters to Meet Northeastern Tonight on Boston Arena Ice

Frosh Face Browne and Nichols

Middlebury Loses To Beaver Squad By Count of 3-1

After a weekend in which they broke even in two games the Beaver puckmen are preparing for their contest tonight with the Northeastern Huskies in the Boston Arena. The team is out to avenge the defeat they received at the hands of Northeastern earlier in the season and in view of their recent performances the Beavers stand a good chance of taking the decision. The Tech-Northeastern game will be part of a doubleheader, the other half of which will feature Boston College and Dartmouth. The four teams will play in alternate periods starting at 7:30 P.M.

The lineup for Tech will probably be:

White	center	Noreen
Morrow	right wing	Willard
Bettes	left wing	Burdakin
Kaneb (Capt.)	rt defense	Verrochi
Seifert	left defense	Madden
Tashjian	Goalie	Mason

Alternates—Gillen and Russell.

On last Saturday afternoon the icemen notched their second victory over the Middlebury Panthers by a score of 3-1 having defeated that team at the Lake Placid Tournament in December by a count of 4-2. The game was scoreless until Dick Merrow slipped the priority pellet past the Middlebury netminder early in the second stanza assisted by Dick Bettes. In the third period Bud Willard scored assisted by Charlie Seifert and Johnny White made the lead three points when he tallied aided by Dick Merrow. Goalie Al Tashjian, who performed well throughout the contest, was within inches of a shut-out when Moore of the Panthers, assisted by Pepin, managed to slip one into the cage for the opponents lone tally.

At Northfield, Vermont on Friday the stickmen were less fortunate and dropped a contest to the Norwich Horsemen by a 7-3 score. Poor ice hampered the performance of both teams and necessitated that the teams play two fifteen and one ten minute periods. Bettes and Merrow teamed up to make two of the Tech scores while Merrow assisted Johnny White in the third tally. In both games the Beavers were minus the services of Seniors, Fred Kaneb (Capt.), Bill Verrochi, and Bob Mason. The lineups for the weekend games were as follows:

White	center	Noreen
Morrow	right wing	Willard
Bettes	left wing	Gillen
Burdakin	right defense	Russell
Seifert	left defense	Madden

Tashjian—Goalie.

According to Fran Carey, manager of the squad, a game is scheduled with the Ephmen from Williams College on Friday night in the Boston Arena. The Beavers hope to avenge a loss suffered at the hands of Williams in the Lake Placid tourney in December. The team will wind up its season with a game against the Dartmouth Indians at Hanover on January 19.

The frosh pucksters will be seeking their second win of the campaign tomorrow when they go out on the ice against the Browne and Nichols Preparatory School sextet on enemy ice in Cambridge. The first year men gained their first decision against Belmont Hill prep school in December by a count of 7-5. The Beaver yearlings will conclude their season on Saturday against a team from the Rivers Country Day School according to Kemp Reade, frosh manager. The lineup for the coming freshman games is as follows:

Center, Gale; left wing, Walker; right wing, Russell; left defense, Madden; right defense, Clifford; goalie, Cox; Alternates, Brayton, Gallagher, Starrett and White.

SPORTS CALENDAR

Tuesday, January 12
Swimming, varsity vs. Bowdoin, there, 4:00 P.M.
Hockey, varsity vs. Northeastern, Boston Arena, 8:30 P.M.

Wednesday, January 13
Swimming, freshman vs. Andover Academy, Alumni Pool, 4:30 P.M.
Basketball, varsity and freshman vs. Brown, Walker Gym, 7:00 P.M.
Hockey, freshman vs. Browne and Nichols Preparatory School, there.

Swimmers Drown Terrier Mermen In Alumni Pool

Findlay Lowers Mark In Backstroke Race Frosh Are Swamped

Notching their third victory of the season the Beaver mermen swamped the Boston University Terriers on Saturday night by a score of 53-22. Standout performance of the meet was turned in by Gordon Findlay of Tech who lowered the varsity backstroke record by more than three seconds when he copped that event in the time of 147.4 seconds. The former mark stood at 150.6 seconds. The Beaver natators fumbled a chance for an even higher score when they were disqualified in the medley relay.

Captain Bob Wheeler of the Terriers personally accounted for 10 of his team's points when he notched the 220 yard free style and the 220 yard breaststroke races. The individual results of the meet are as follows:

50-yard free style—Won By Leonard (T); second, Mara (B.U.); third, Cruckshank, (T); Time—26.1 sec.

Diving—Won by Hunn, (T); second, Greeley, (T); third, McKee, (B.U.); Points—79.2.

100-yard free style—Won by Lamadrid, (T); second, Ilfeld, (T); third, Mara, (B.U.); Time—60.4 sec.

150-yard backstroke—Won by Findlay, (T); second, Granlund, (T); third, McKee, (B.U.); Time—107.4 sec.

200-yard breast stroke — Won by Wheeler, (B.U.); second, Knodel, (T); third, Cochran, (T); Time —2 min., 46.5 sec.

440-yard free style—Won by Smith, (T); second, Bressler, (T); third, Hobbs, (B.U.); Time—5 min., 54.6 sec.

400-yard relay — Won by Tech (Lamadrid, Ilfeld, Cruckshank, Leonard.) Time—4 min., 16.1 sec.

300-yard medley relay — Won by B.U. (Sacks, McKee, Collard), Tech (disqualified), Time—4 min., 25 sec.

220-yard free style — Won by Wheeler, (B.U.); second, Bressler, (T); third, Smith, (T). Time—2 min., 36.3 sec.

The Beaver frosh did not fare as well in their encounter with the Terrier first year men, however, coming out on the short end of a 47-19 count.

Today the varsity mermen will journey to Brunswick, Maine to face

W.P.I. Defeated By Tech Skiers

Klein Takes Slalom Race Held On Sunday

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The hospitality of the W.P.I. boys couldn't be beaten according to thoughts expressed by some of the boys on the team. The W.P.I. outing club which has been defunct for several seasons has recently been revived and the first effort of their new lease on life was the very fine skiing team which the Beavers encountered.

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 6. Wilson (T), 65.3 sec.
 7. Lewis (W), 72.9 sec.
 8. Hegman (W), 77.6 sec.
 9. Abreu (T), 77.7 sec.
 10. Mavor (T), 78.1 sec.
 11. Barritt (W), 87.7 sec.
 12. Shelby (T), 93.0 sec.
- Total: Tech, 90.0; W.P.I., 86.9.

the Bowdoin College Polar Bears in search of their fourth victory of the current campaign. On Wednesday the frosh swimmers will meet the Andover Academy team in a meet in the Alumni pool.

Crew House Reopened After Fuel Troubles

The recent temporary closing of the crew house has been explained as being caused by a lack of oil for heating purposes. That difficulty has been corrected, however, since an ample supply has been procured. The crew house is now open and all facilities are available to those who were making use of them before the Christmas recess, and any others interested. It has also been announced that organized freshman crew training will commence on the first day of the coming spring term.

Swordsmen Tied By Crimson Team Saturday, 13½-13½

Colsmann And Vicini Win Three Matches Each To Pace Team

After a hard struggle, which at one time found Tech ahead by seven points, the Beaver swordsmen were held to a tie by the Harvard fencing team, in a meet held last Saturday at Harvard. Although Tech won decisively in the foils and epee, thereby giving the teams an even split of the day's matches, 13½ apiece. Colsmann and Vicini, the Freshman star, were the outstanding fencers for the Beavers. The individual scores were as follows:

FOIL

For Tech: Colsmann defeated Rackwood (5-3), Du Bois (5-4), Cooledge (5-4); Ackerman defeated Du Bois (5-4), Thompson (6-1); Seaman defeated Rackwood (5-4).

For Harvard: Rackwood defeated Ackerman (5-3), Du Bois defeated Seaman (5-2); Thompson defeated Braendle (5-2). Final score: Tech 6, Harvard 3.

EPEE

For Tech: Kratz defeated Olmsted (3-0), Du Bois (3-0); Vicini defeated Olmsted (3-2), Mishana (3-1), Du Bois (3-2); Maconi defeated Johnson (3-0).

For Harvard: Olmsted defeated Maconi (3-2), Mishana defeated Kratz (3-0), Mishana and Maconi tied (3-3). Final score: Tech, 6½; Harvard, 2½.

SABRE

For Tech: Higgins defeated Kuhlman (5-1).

For Harvard: McNeal defeated Higgins (5-4), Schulman (5-3), and Maconi (5-3); Ward defeated Higgins (5-4), Schulman (5-2), and Maconi (5-4); Cooledge defeated Maconi (5-3), and Schulman (5-0). Final score: Tech, 1; Harvard, 8.

This weekend the team will make a trip to Hamilton College and Cornell U. for dual meets on Friday and Saturday, according to Larry Churchill, fencing manager. The following men are expected to make the trip: Ackerman, Colsmann, Seaman, Kratz, Maconi, Vicini, Higgins, Schulman, Braendle, and Horn.

Jumbos Topple Tech Hoopsters In Walker Gym

Jumblets Edge Frosh In Preliminary Fray, Madden Paces Attack

Unable to rally after an exceedingly slow start, the Beaver cagers succumbed to an onslaught of shooting dished out by a powerful Tufts College quintet last Friday in Walker Memorial Gym to the tune of 74-31. Paced by a trio of frosh who amassed 42 points among them, the Jumbo's were unbeatable as they administered the worst defeat the Beavers have received so far this season. The losing cause was led by Cal Taft who garnered a total of 7 points. Spud Shapiro got 20 markers for the victors and was followed by Rock Antonelli with 15 tallies.

Able to cut the cords but once in the opening few moments the Tech cagers found themselves on the short end of a 24-2 count at the end of ten minutes of play. By the half the Beavers had scored but 8 points against the opponents 37. Making full use of all free throws, in which they got 14 out of 19, the Jumbos ran the count up to 57-21 at the end of the third stanza.

The frosh were edged out in a late rally staged by the Tufts first year quintet and met defeat by the count of 41-37. Madden garnered 10 points for the losers while Brown followed closely with 8 markers.

This Friday the Brown University Bruins will invade Walker Gym and the Beavers will attempt to turn the tide of defeat which of late has been their lot. The freshman preliminary with the cubs will get under way at 7:00 P.M.

Cindermen To Pick New Captain, Sat.

Frosh Trophy To Be Awarded At Meeting

"The track team will have a meeting this Friday afternoon at 5:00 P.M. in the Barber Field House, for the purpose of electing a new captain for the coming year and deciding the varsity-frosh question," stated Oscar Hedlund, coach of the teams.

"The election of captain for the coming year has come up so early," said Oscar, "because of the early senior graduation and the loss of our present captain through graduation." The new captain will hold that position until January 1944.

"In regards to the freshman status," he continued, "the freshman schedule for the winter and spring meets will continue as usual. If some of the freshmen want to run in varsity competition, and we think it is advisable, we will let them run on the varsity team".

The L. S. Thorsen trophy will also be presented at this meeting. This

(Continued on Page 4)

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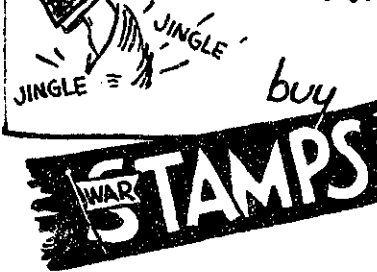
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Catholic Club Meets Tomorrow

Tomorrow night at 5:00 P.M. the Massachusetts Institute of Technology Catholic Club will hold its regular weekly meeting in Room 10-267. The business on hand for the meeting is very important according to John A. White, '44, treasurer of the organization, as the election of officers for the coming year is to be held. Thus it is desirable, White continued, that all members of the club who can possibly make it be at this meeting.

At the last meeting, held Wednesday, January 6, a number of proposed revisions and amendments to the constitution were made. These revisions, together with any others which may come up during the course of tomorrow's meeting, will be discussed further, and perhaps acted upon, White said.

Those persons eligible for election as officers of the club were also announced at the last meeting.

Textile Technology

(Continued from Page 2)

of new materials. Fire insurance companies have also placed a demand for fire-proof textile to replace materials which must be of a textile nature.

And there is always the more obvious field of art in textile design. Not only do colors play a large part, but the actual design of the weave is partly a matter of art, partly a matter of the strength of the material. Art alone in the field of architecture has opened up, if not necessitated, new uses of fabrics, as fabrics are coming more and more to replace the superficial building materials used in the past. Conversely, new developments in textiles has opened up new possibilities in the field of architecture.

So the relatively small space consumed by the Department of Textile Technology, now a branch of Mechanical Engineering, takes on a new meaning, especially in the application of the integration of all the fields which make up the Institute. While the contributions to the textile world have not been obvious, Professor Schwarz pointed out that the "subtle" improvements have been great, and will show up only when the technological advances after the war makes the improvements necessary.

Special Notice To Graduates

It is well at this time, to give serious thought to the preparation of your uniform requirements, and be ready when your call comes.

Last minute preparations have always meant disappointments, dissatisfaction, and in most cases, additional expense.

Care must be given, not only to quality of fabric, but also to quality of tailoring.

Machine-made uniforms can adhere to regulations just as close as hand-made garments, but they do not have the same long-life possibilities, nor can they be made to fit as well, or to express your own individuality.

It is suggested that you check on the advisability of having your uniforms made to your individual measurements, and get these special services at prices comparable to ready-to-wear.

Tedford-Harvard, Inc., 1442 Massachusetts Avenue, Harvard Square, is equipped to render these special services, and will welcome a visit from you without obligation.

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—Adv.

E.R.C. Navy Students

(Continued from Page 1)

representative of the institution attended, if the student has been in attendance for a reasonable length of time. These letters will be obtained for students through the Advisory Office instead of having them get them directly from the Dean's office, Professor John D. Mitsch, Armed Services Representative, said.

The document which may take the longest for students under 21 to obtain is the consent of parents or guardians to enlist in this Naval Reserve. Even if this consent has been obtained to enter the Army Enlisted Reserve Corps, it must be done again on the proper Navy forms. These forms can be obtained at the Advisory Office.

Each applicant must also present a resume of not less than fifty words in the applicant's own handwriting covering all occupational and military service or training. Two photographs (head and shoulders only), one full face and one profile 2½ by 2½ inches, are also necessary.

Must Show Discharge Papers

Applicants who have had previous military or Naval training will be required to present their discharge certificates. This will apply to men now in the Army Enlisted Reserve Corps, but these certificates cannot be obtained until the time that the actual change takes place.

The Advisory Office will take care of getting a statement from the Registrar certifying that the candidate is a regularly enrolled freshman or Sophomore in good standing, and is enrolled in the minimum required courses, as this certificate is also required by the Navy.

No actual enlistment in the Navy can take place until the applicant presents all the documents listed above, in complete and final form, and has completed his final V-1 physical examination. Although the transfer will not take place as soon as was intimated in the postcards sent out January 4, it is important that all men have all the necessary papers for the transfers.

Men under 18 who wish to enlist for the first time in the Naval Reserve also need to have all these papers. They are also cautioned that the enlistments for men 17 years old will be closed on March 15, 1943, as announced in the Army-Navy plans of December 18, 1942. Waivers for physical, educational, or other requirements, will not be recommended by the Advisory Office except for those students in good standing who are pursuing course in Naval Architecture, and who are considered outstanding officer material.

Infirmary List

James A. Barnes, Employee.
Victor Saganey, Employee.
John O. Atwood, '46.
Joseph Lasalle, Staff.
Lt. Charles King, Chemical Warfare Dept.
Robert Horne, '42.
Theodore C. Hossfeld, '45.
Spiros G. Pantazi, '45.
William P. MacDonald, '43.
James H. Barnes, '44.
Joseph A. Vitka, Jr., '43.
Lee C. Eagleton, '43.
Gilbert B. Gould, '43.
In Haynes Memorial Hospital:
Stewart Rowe, '43.

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Grapplers Topped By Williams Squad In Thrilling Meet

Ephmen Gain Decision Over Beavers With Three Pins, Default

Featuring a very spectacular contest, the M.I.T. wrestling team was defeated by Williams in a very close match. The Tech matmen journeyed to Williamstown, Mass., by train, arriving at 2:00 P.M. in time for the match.

By far the fastest match was between Maznik of Tech and Jones of Williams. Last year Jones was New England Intercollegiate champion in the 175 lb. class and winner of the best wrestler award which covers all weight classes. The two grapplers fought a very quick and even match for nearly 7 minutes until Jones finally defeated Maznik by a fall in 6:57 minutes. The two freshmen who wrestled in the match made an enviable record for themselves, stated Johnny Lutz, wrestling coach, in that they both won their matches, in their first varsity intercollegiate wrestling tournament. According to Lutz, their very good showing should add another point of proof to the capability of freshmen in varsity sports. Both freshmen, Pollard and Gaillard won their matches with fast wrestling and succeeded in downing two very able opponents decisively. In the 165 lb. class, Ackerman wrestled his best match of the year in easily taking his match from Strong of Williams by a fall in 3:19 minutes. Coach Johnny Lutz stated last night that the match was one of their most evenly fought matches that they have had all season, but that wrestlers are needed in the 121 lb. class and this fact was further emphasized by the fact that Tech lost five points by having to forfeit the 121 lb. class to Williams.

European Reconstruction

(Continued from Page 2)

and habits, especially our certainty that reform can be gradual. The law-abiding, the good citizens, the men of good will and common sense, the temperate were on our side. Quite naturally we linked an acceptance of our political and social system to all sorts of moral virtues. But that connection existed only in our minds. Now we are finding out with some surprise that the real world is different.

Fascism Is a Poison

We thought of the fascists as tyrants under whose oppression the "decent people" were sitting around in various stern and indignant, if dejected, attitudes. We refused to see that fascism is a kind of plume of modern society, present even among us, a pervasive and paralyzing social poison. Once it has taken hold of a citizenry, it is the average, the law-abiding, and the temperate who are first infected and won over. The substantial citizens become its accomplices and stooges. Only those can save themselves who go "all out" against the whole system, the non-compromisers, by definition. Finally, whether the enemy be within or without, the whole country is rotten with Darlan's, small and big.

And now we, all of us, find we cannot give up our good conservative instincts. We are looking to those same conservative substantial

CALENDAR

TUESDAY, JANUARY 12

All Day Technique On Sale—Main Lobby of Building 10.
11:00 A.M.-2:00 P.M. Senior Week Options Redeemable — Main Lobby of Building 10.
7:30 P.M. Radio Society Meeting—Room 10-275.
7:45 P.M. Boston Section of A.I.E.E. Meeting—Northeastern University.

WEDNESDAY, JANUARY 13

All Day Technique On Sale—Main Lobby of Building 10.
11:00 A.M.-2:00 P.M. Senior Week Options Redeemable — Main Lobby of Building 10.
5:00 P.M. Catholic Club Meeting—10-267.
5:00 P.M. Rehearsal of Concert—5:15 Club Room.
5:00 P.M. T.C.A. Cabinet Meeting—T.C.A. Office.
6:30 P.M. Industrial Relations Section Dinner — Pritchett Hall.

THURSDAY, JANUARY 14

11:00 A.M.-2:00 P.M. Senior Week Options Redeemable — Main Lobby of Building 10.
5:00 P.M. T.C.A. Freshman Cabinet Meeting—T.C.A. Office.
6:30 P.M. A.S.M.E. Dinner—Pritchett Hall.
7:45 P.M. East and West Association Meeting—Dutch Room of Graduate House.

Senior Week

(Continued from Page 1)

speaker on this occasion last year. The informal party on Friday night, January 29, will be held at the Commonwealth Country Club. The Club is located at the end of the Lake Street Car line. Refreshments will be served.

Shall the Ball Be Informal

The Senior Week Committee has received several letters requesting that, in view of the latest development in the transportation—pleasure driving—situation, the Senior Ball be changed from formal to informal. As this appears to the committee to be the opinion of quite a number of the Seniors, they would like to have all of the Seniors express their opinions on this matter in writing. Letters should be addressed to Kenneth Wadleigh, care of M.I.T.A.A., Walker Memorial.

sets over there for structural materials with which to build the new society. But as we try to bundle them, they crumble and melt in our hands and leave us all besmeared with the sinister phosphorescence of decay.

Justice Is Needed First

This time we cannot accuse any conspiracy of politicians, of bankers or of foreign diplomats for the mess we are in. It is we as a people who have never been concerned with the great world plague until it bore down upon us. It is we who found it more easy to deal with our enemies and embargo our friends. It is we who still are not able to "know how it feels" for those who really suffered under fascism. Those men believe that some justice, even symbolic, would be a more urgent tonic for society, a better instrument of warfare, and a more realistic policy than perpetual "expediency" though the latter may be backed by any amount of canned meat, of flour, of blankets, and, indeed, of order in the streets.

The parable of the house that was built on sand still comes before all talk of reconstruction.

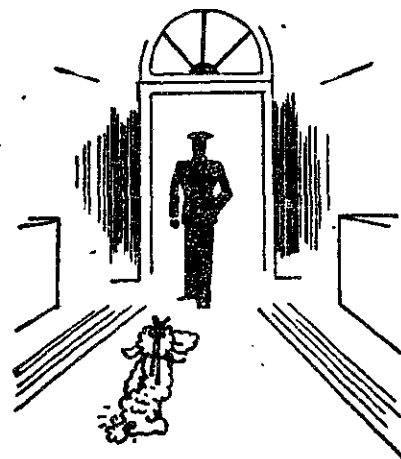
Frosh Track Trophy

(Continued from Page 3)

trophy is awarded to the freshman who has made the best showing and the greatest improvement over the past months. Thorsen was captain of the varsity cross-country team in 1930 and he presented the trophy to the Institute for this purpose.

Next Saturday afternoon, the first relay trials will be held for the varsity mile and the freshman mile. In addition there is going to be a meet for all other track men on the field who wish to compete. The meet "All-Around Competition", will include the 40 yard dash, the shot put, and the 600 yard run. All men who wish to enter the contest must compete in all events.

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6.40, 4 to 6 P.M.

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